City of Kirkland Public Works Department 2016 Improvement Evaluation Summary

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Type of Project	Subdivision	~
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Permit Number	LSM16-00620
Project Name	MacDonald Estates South Short Plat
Project Location	12704 72nd Ave NE
Contact	Todd A. Oberg, PE
Phone Number	425-250-7224

This form must be completed by the developer (or representative) and shall include all work required by the official Notice of Approval or conditions on the permit. Quantity take-offs shall be from documents approved by the City of Kirkland.

PUBLIC IMPROVEMENTS will be owned and maintained by the City after the appropriate maintenance period and will be subject to review and inspection fees per KMC Section 5.74.040. For subdivision work, this will include the on-site detention system.

PRIVATE IMPROVEMENTS will be owned and maintained by the property owner(s), and is not subject to the above fees. For subdivisions, include the remainder of the on-site storm drainage system (excluding the detention system) and any easement road paving. For all other types of projects, include the on-site storm drainage system only.

Items Required	Public Improvements	Private Improvements	Total Value
Construction Storm Drainage	\$21,326.00		\$21,326.00
Clearing and Grading	\$23,750.00		\$23,750.00
Water System	\$0.00		\$0.00
Sanitary Sewer System	\$0.00		\$0.00
Storm Drainage System	\$204,390.00	\$12,350.00	\$216,740.00
LID - Storm Drainage	\$0.00	\$0.00	\$0.00
Paving	\$178,665.00	\$11,800.00	\$190,465.00
Curb and Gutter	\$49,770.00		\$49,770.00
Sidewalks	\$57,520.00		\$57,520.00
Landscaping	\$7,455.00		\$7,455.00
Miscellaneous	\$29,135.00	\$9,900.00	\$39,035.00
Other Agency Improvements	\$0.00		\$0.00

Totals	\$572,011.00	\$34,050.00	\$606,061.00
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Agent/Owner	720	Date 7-15-16
City	0	Date

REVIEWED: July 15, 2016

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Refer to Security calculations on page 2.

ROW Restoration Security: \$50,000

Permit Fee Calculations

Public Works Review and Inspection Fees are based on 10% of the total value of Public Work required and private storm drainage and LID work required.

Total Value of Public Work Required	\$572,011
Private Storm Drainage and LID Work Required	\$12,350
Review and Inspection Fee - Public Work	\$57,201
Review and Inspection Fee - Private Storm	\$1,235

Performance Security Calculations

Have engineering plans been submitted to the City?



If yes:

17.5% of total construction value will be added to the Performance Security for Mobilization, Traffic Control, Surveying, Engineering, and Record Drawings.

30% contingency will be added for construction uncertainty.

Total Performance Security	\$925,758
30% Contingency	\$213,637
17.5% Overhead	\$106,061
Total Value of Work	\$606,061

If no:

17.5% of total construction value will be added to the Performance Security for		
Mobilization, Traffic Control, Surveying, Engineering, and Record Drawings.		
30% contingency will be added for design.		
30% contingency will be added for construction uncertainty.		

Total Value of Work	\$606,061
17.5% Overhead	\$106,061
30% Design Contingency	\$213,637
30% Construction Contingency	\$277,727
Total Performance Security	\$1,203,486

Maintenance Security Calculation

Maintenance Security is 10% of the total cost of Public Improvements and Private Storm Drainage and LID Improvements, including a 30% contingency.

Public Improvements	\$572,011
Private Storm Drainage	\$12,350
Private LID	\$0
Subtotal	\$584,361
30% Contingency	\$175,308
Total	\$759,669

Maintenance Security (10% of Total)	\$75,967

Public Improvements

Construction Storm Drainage

ltem	Unit	Quantity	Unit Price	Amount
Silt Fence, Installed	LF	2325	\$5.00	\$11,625.00
Grading for Drainage Swales	LF	350	\$4.00	\$1,400.00
Sod for Drainage Swales	SY	80	\$9.00	\$720.00
Hydroseeding	SY		\$1.00	\$0.00
Construction Entrance (SF)	EA	1	\$3,200.00	\$3,200.00
Construction Entrance (MF/COM/Other)	EA		\$6,400.00	\$0.00
Inlet Protection	EA		\$74.00	\$0.00
Straw Wattle	LF		\$4.00	\$0.00
Orange Construction Fencing	LF	1435	\$3.00	\$4,305.00
Check Dam	EA	4	\$19.00	\$76.00
				\$0.00
				\$0.00

Construction Storm Drainage - Total	\$21,326.00
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Clearing and Grading

Item	Unit	Quantity	Unit Price	Amount
Half-Street Improvements	LF	500	\$47.50	\$23,750.00
Full-Street Improvements	LF		\$95.00	\$0.00
				\$0.00
				\$0.00

Clearing and Grading - Total	\$23,750.00

Water System

Item	Unit	Quantity	Unit Price	Amount
Water Service - 3/4" to 1"	LS		\$2,050.00	\$0.00
Water Service - 1 1/2" to 2"	LS		\$4,725.00	\$0.00
4" Pipe	LF		\$65.00	\$0.00
6" Pipe	LF		\$97.00	\$0.00
8" Pipe	LF		\$124.00	\$0.00
12" Pipe	LF		\$158.00	\$0.00
2" Gate Valve	EA		\$300.00	\$0.00
4" Gate Valve	EA		\$600.00	\$0.00
6" Gate Valve	EA		\$1,500.00	\$0.00
8" Gate Valve	EA		\$1,600.00	\$0.00
12" Gate Valve	EA		\$2,300.00	\$0.00
Connection to Ex. Main	EA		\$4,800.00	\$0.00
Fire Hydrant Assembly	EA		\$6,540.00	\$0.00
2" Blow Off	EA		\$2,200.00	\$0.00
Air and Vacuum Assembly	EA		\$4,450.00	\$0.00
Valve Marker Post	EA		\$200.00	\$0.00
5" Storz Coupling	EA		\$500.00	\$0.00
Adjust Ex. Water Meter	EA		\$600.00	\$0.00
				\$0.00
				\$0.00

Water System - Total	\$0.00

Sanitary Sewer System

ltem	Unit	Quantity	Unit Price	Amount
6" PVC Pipe	LF		\$100.00	\$0.00
8" PVC Pipe	LF		\$120.00	\$0.00
12" PVC Pipe	LF		\$150.00	\$0.00
Extra Depth Excavation (Over 12' Deep)	FT*LF		\$8.00	\$0.00
48" Manhole	EA		\$3,600.00	\$0.00
54" Manhole (Drop MHs Only)	EA		\$4,000.00	\$0.00
Internal Drop Structure	EA		\$970.00	\$0.00
Rechannel Existing MH	EA		\$2,660.00	\$0.00
Cast Iron Clean Out Cover	EA		\$160.00	\$0.00
Clean Out Assembly	EA		\$735.00	\$0.00
				\$0.00
				\$0.00

Sanitary Sewer System - Total \$0.0	00
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Storm Drainage System

Item	Unit	Quantity	Unit Price	Amount
8" Pipe	LF		\$65.00	\$0.00
12" Pipe	LF	775	\$70.00	\$54,250.00
18" Pipe	LF	1085	\$80.00	\$86,800.00
24" Pipe	LF		\$100.00	\$0.00
30" Pipe	LF		\$120.00	\$0.00
36" Pipe	LF		\$133.00	\$0.00
48" Pipe	LF		\$145.00	\$0.00
Extra Depth Excavation (Over 12' Deep)	FT*LF		\$6.00	\$0.00
Detention Vault	CF		\$10.00	\$0.00
Other Flow Control Facility	LS			\$0.00
Curb Inlet	EA	2	\$1,500.00	\$3,000.00
Type I Catch Basin	EA	11	\$1,100.00	\$12,100.00
Type IL Catch Basin	EA		\$1,500.00	\$0.00
Type II Catch Basin - 48"	EA	9	\$3,300.00	\$29,700.00
Type II Catch Basin - 54"	EA	1	\$4,700.00	\$4,700.00
CMP Access to Riser	EA		\$1,600.00	\$0.00
Connection to Existing CB	EA	1	\$940.00	\$940.00
Restrictor/Pollution Control - 8"	EA		\$900.00	\$0.00
Restrictor/Pollution Control - 12"	EA	1	\$900.00	\$900.00
Pollution Control Tee	EA		\$500.00	\$0.00
Debris Barrier	EA	3	\$1,400.00	\$4,200.00
Biofiltration Swale	LF		\$15.00	\$0.00
Detention Pond	CY	3100	\$1.50	\$4,650.00
Pond Access Road	SY	150	\$21.00	\$3,150.00

Storm Drainage System - Total	\$204,390.00

Low Impact Development

Item	Unit	Quantity	Unit Price	Amount
Pervious Concrete	SY		\$108.00	\$0.00
Pervious Asphalt	SY		\$44.00	\$0.00
Pervious Pavers	SY		\$120.00	\$0.00
Infiltration/Dispersion Trench (10')	EA		\$300.00	\$0.00
Rain Garden	SY		\$120.00	\$0.00
Soil Amendment	SY		\$1.50	\$0.00
Drywell Infiltration (90 cf)	EA		\$500.00	\$0.00
				\$0.00
				\$0.00

Low Impact Development	\$0.00

Paving

Item	Unit	Quantity	Unit Price	Amount
AC Pavement Patching	SY		\$21.00	\$0.00
4" Crushed Rock	SY	4940	\$12.00	\$59,280.00
Bank Run Gravel: 3" minus, in place	CY		\$68.00	\$0.00
4" Asphalt Treated Base (ATB)	SY		\$21.00	\$0.00
2" Class B Asphalt Pavement	SY	4395	\$19.00	\$83,505.00
Saw Cut AC Pavement	LF		\$3.50	\$0.00
Cold Planing (Grinding) & Hauling	SY	2760	\$13.00	\$35,880.00
Adjust Existing Utility	EA		\$525.00	\$0.00
				\$0.00
				\$0.00

Paving - Total	\$178,665.00
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Curb and Gutter

Item	Unit	Quantity	Unit Price	Amount
Concrete Extruded Curb	LF		\$16.00	\$0.00
Asphalt Extruded Curb	LF		\$8.00	\$0.00
Concrete Curb and Gutter, Type A	LF	1185	\$42.00	\$49,770.00
Rolled Concrete Curb and Gutter	LF		\$28.00	\$0.00
				\$0.00
				\$0.00

Curb and Gutter - Total	\$49,770.00
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Sidewalks

Item	Unit	Quantity	Unit Price	Amount
5' Concrete Sidewalk	LF	800	\$44.00	\$35,200.00
Concrete Sidewalk (other than 5')	SF		\$6.00	\$0.00
5' Concrete Driveway	LF	200	\$36.00	\$7,200.00
Asphalt Walkways, Class B	SY		\$49.00	\$0.00
Wheel Chair Ramps	EA	2	\$2,060.00	\$4,120.00
Safety Railing	LF		\$130.00	\$0.00
Steel Pipe Handrail	LF		\$61.00	\$0.00
Vinyl Fencing	LF		\$19.00	\$0.00
Speed Hump Restoration	EA		\$1,500.00	\$0.00
5' Pervious Sidewalk	LF		\$212.00	\$0.00
Chainlink Fence - Vinyl Coated	LF	550	\$20.00	\$11,000.00
				\$0.00

Sidewalks - Total	\$57,520.00

Landscaping

Item	Unit	Quantity	Unit Price	Amount
Street Trees	EA	21	\$355.00	\$7,455.00
Sod	SY		\$45.00	\$0.00
Seeded lawn	SY		\$5.00	\$0.00
Rockery Wall	SY		\$400.00	\$0.00
				\$0.00
				\$0.00

Landscaping - Total	\$7,455.00

Miscellaneous

ltem	Unit	Quantity	Unit Price	Amount
Monuments	EA	5	\$875.00	\$4,375.00
Street Signs	EA	1	\$220.00	\$220.00
Pavement Marking	LF		\$1.30	\$0.00
Mailbox Structure	EA	1	\$540.00	\$540.00
Type III Fixed Barricade	EA		\$400.00	\$0.00
Bollards	EA		\$840.00	\$0.00
Removable Bollards	EA		\$340.00	\$0.00
Thermoplastic Crosswalk Markings (\$500 min)	LF		\$7.00	\$0.00
Street Light	EA	6	\$4,000.00	\$24,000.00
PED Light	EA		\$5,000.00	\$0.00
Modular Block Walls			\$32.00	\$0.00
				\$0.00
				\$0.00

Miscellaneous - Total	\$29,135.00
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Other Agency Improvements

Item	Unit	Quantity	Unit Price	Amount
Northshore Utility District	LS			\$0.00
Woodinville Water District	LS			\$0.00
Puget Sound Energy	LS			\$0.00
				\$0.00
				\$0.00

Miscellaneous - Total	\$0.00

Private Improvements

Storm Drainage System

Item	Unit	Quantity	Unit Price	Amount
4" - 6" Pipe	LF	360	\$24.00	\$8,640.00
8" Pipe	LF		\$65.00	\$0.00
12" Pipe	LF		\$70.00	\$0.00
18" Pipe	LF		\$80.00	\$0.00
24" Pipe	LF		\$100.00	\$0.00
Extra Depth Excavation (Over 12' Deep)	FT*LF		\$6.00	\$0.00
Detention Vault	CF		\$10.00	\$0.00
Other Flow Control Facility	LS			\$0.00
Yard Drain	EA	14	\$265.00	\$3,710.00
Type 40 Catch Basin	EA		\$1,225.00	\$0.00
Curb Inlet	EA		\$1,500.00	\$0.00
Type I Catch Basin	EA		\$1,100.00	\$0.00
Type IL Catch Basin	EA		\$1,500.00	\$0.00
Type II Catch Basin - 48"	EA		\$3,300.00	\$0.00
Type II Catch Basin - 54"	EA		\$4,700.00	\$0.00
CMP Access to Riser	EA		\$1,600.00	\$0.00
Connection to Existing CB	EA		\$940.00	\$0.00
Restrictor/Pollution Control - 8"	EA		\$900.00	\$0.00
Restrictor/Pollution Control - 12"	EA		\$900.00	\$0.00
Pollution Control Tee	EA		\$500.00	\$0.00
Debris Barrier	EA		\$1,400.00	\$0.00
Biofiltration Swale	LF		\$15.00	\$0.00
Tightline Existing House Roof Drain	LF		\$15.00	\$0.00
				\$0.00
				\$0.00

Storm Drainage System - Total	\$12,350.00

Low Impact Development

ltem	Unit	Quantity	Unit Price	Amount
Pervious Concrete	SY		\$108.00	\$0.00
Pervious Asphalt	SY		\$44.00	\$0.00
Pervious Pavers	SY		\$120.00	\$0.00
Infiltration Trench (10')	EA		\$300.00	\$0.00
Rain Garden	SY		\$120.00	\$0.00
Soil Amendment	SY		\$1.50	\$0.00
Drywell Infiltration (90 cf)	EA		\$500.00	\$0.00
				\$0.00
				\$0.00

Low Impact Development	\$0.00

Paving

Item	Unit	Quantity	Unit Price	Amount
4" Crushed Rock	SY		\$12.00	\$0.00
4" Asphalt Treated Base (ATB)	SY	295	\$21.00	\$6,195.00
2" Class B Asphalt Pavement	SY	295	\$19.00	\$5,605.00
				\$0.00
				\$0.00

Paving - Total	\$11,800.00

Miscellaneous

Item	Unit	Quantity	Unit Price	Amount
Property Corners	EA	33	\$300.00	\$9,900.00
Street Signs	EA		\$220.00	\$0.00
Fire Lane Marking	LF		\$2.00	\$0.00
UG Utilities to Existing House	EA		\$2,500.00	\$0.00
Modular Block Wall	SF		\$32.00	\$0.00
				\$0.00
				\$0.00

Miscellaneous - Total	\$9,900.00